

## MATERIAL SAFETY DATA SHEET

**Product:** Rat Creatine Kinase MB Isoenzyme (CK-MB) ELISA

**Cat. No.:** KT-12247 (96 tests)

### Composition:

**Reagents:** Kit reagents are not considered to be hazardous. They contain less than 1% hazardous chemicals and less than 0.1% carcinogenic chemicals.

**Antibody Coated Microwells:** Anti-CK-MB antibody.

**Detection Reagent A (120 µL):** Detection antibody; 50% glycerol.

**Detection Reagent B (120 µL):** HRP-linked Avidin; 50% glycerol.

**30X Wash Buffer (20 mL):** 1% tween-20, 0.33% Thymol in 30X TBS.

**Calibrator Diluent (20 mL):** 0.1% tween-20, 0.1% sodium azide in TBS.

**TMB Substrate (9 mL):** 0.05% 3,3',5,5'-tetramethylbenzidine.

**Stop Solution (6 mL):** 1 mol/L H<sub>2</sub>SO<sub>4</sub>.

**Reference Standard (2 vials):** recombinant protein, which is neither produced from phage producing E. coli. nor virus producing cells, in a buffer with preservatives, lyophilized.

**2X Assay Diluent A (6 mL):** 2X TBS with 2% BSA and 0.1% sodium azide.

**2X Assay Diluent B (6mL):** 2X TBS with 2% BSA and 0.1% sodium azide.

### Health Hazard Data:

**Emergency Overview:** No specific hazard.

### HMIS Rating:

Health: 0 Flammability: 0 Reactivity: 0

### NFPA Rating:

Health: 0 Flammability: 0 Reactivity: 0

**Routes of Entry:** Avoid ingestion and inhalation, avoid contact with skin and eyes.

**Threshold Limit Value (TLV) and Source:** Data N/A. To the best of our knowledge the chemical, physical, and toxicological properties of the components in this kit have not been thoroughly investigated.

**Potential Acute Health Effects:** May cause acute skin, eye, or lung irritation. To the best of our knowledge the chemical, physical, and toxicological properties of the components in this kit have not been thoroughly investigated. Allergy prone individuals should be especially cautious with proteins or other materials of biological origin.

**Carcinogenic Effects Data:** N/A

**Chronic Effects of Overexposure:** N/A

**Vapor Pressure (mm Hg):** N/A

**Solubility in Water:** Liquids readily miscible in water.

### Emergency and First Aid Procedures:

First aid personnel should ensure self protection.

**Swallowing:** If any component of the kit is swallowed rinse mouth with water provided person is conscious. Seek medical attention.

**Skin:** If any component of the kit contacts skin immediately wash skin with soap and copious amounts of water.

**Inhalation:** If any component of the kit is inhaled remove to fresh air. If not breathing perform CPR and seek immediate medical attention.

**Eyes:** If any component of this kit contacts eyes flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Consult a physician.

### Fire and Explosion Hazard Data:

**Flammability:** May be combustible at hiCK-MB temperature.

**Flash Points:** N/A

**Extinguishing Media:** Use dry chemical.

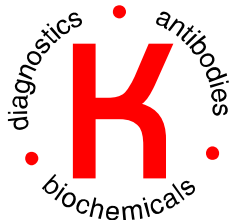
**Special Fire FiCK-MBing Procedures:** Wear NIOSH/MSHA approved self contained breathing apparatus and protective clothing.

**Unusual Fire and Explosion Hazards:** None known.

**Accidental Release Measures:** Use appropriate protective equipment and procedures to clean up all spilled substances. Collect and dispose of all waste in accordance with applicable laws.

### Handling and Storage:

Material may be air sensitive. Dessication is recommended. The Calibrators, Detection Reagent A, Detection Reagent B, and the 96-well plate should be stored at -20C upon receipt. All other kit components should be stored at 4C.



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**Exposure Controls/Personal Protection:**

Wear appropriate gloves, protective clothing, and eyewear, and follow safe laboratory procedures.

**ACGIH/OSHA Permissible Exposure Limit**

**Data:** Not determined.

**Physical Data:****Antibody Coated Microwells:**

Physical state and appearance: Solid (microwells).

Solubility in water: Partially soluble.

**Detection Reagent A, Detection Reagent B, Calibrator Diluent:**

Physical State: Solutions.

Boiling Point: Decomposes.

Vapor Pressure: N/A

Vapor Density: N/A

Specific Gravity: N/A

Melting Point: N/A

Evaporation Rate: N/A

Solubility in Water: Solutions are dilutable.

**30X Wash Buffer, TMB Substrate, Stop Solution:**

Physical State and Appearance: Clear Solutions.

Boiling Point: N/A

Vapor Pressure: N/A

Vapor Density: N/A

Specific Gravity: N/A

Melting Point: N/A

Evaporation Rate: N/A

Solubility in Water: Solutions are dilutable.

**Stability/Reactivity:**

The product is stable.

**Conditions to Avoid:** N/A

**Materials to Avoid:** N/A

**Hazardous Decomposition Products:** N/A

**Toxicological Information:**

**Irritability:** N/A

**Mutagenicity:** N/A

**Reproduction Toxicity:** N/A

**Other Toxic Effects on Rats:** May cause sliCK-MBt irritation in case of eye contact, inhalation, or ingestion.

**Ecological Information:**

Do not allow product to reach ground water, water course, or sewage system.

**Disposal Considerations:**

Consult local, state, or national regulations for proper disposal.

**Transportation Information:**

Overland transportation (ADR/RID): As a mixture, the substance is subject to no limitations.

Transatlantic transportation (IMDG): As a mixture, the substance is subject to no limitations.

Air transportation (ICAO/IATA): As a mixture, the substance is subject to no limitations.

**Regulatory Information:**

Observe the general safety regulations when handling chemicals. No single component contains a hazardous ingredient in an amount that requires identification and labeling.

**Other Information:**

This material is sold for in vitro use or research purposes only. It is not for any rat or animal treatment or clinical diagnostic use.

Read instructions for use before using the product.

Observe the chemical safety regulations when handling chemicals. Good laboratory practice is the best preventive measure to avoid hazards. The information presented here shall not be taken as all inclusive and is to be used only as a guide. All materials and mixtures may presently be unknown hazards and should be used with caution. Since our corporation cannot control the methods, volumes, or conditions of use, Kamiya Biomedical Company shall not be held liable for any damages or losses resulting from the handling or contact with the product described herein.